

APRIL/MAY 2023

**CSMB33 — HAEMATOLOGY AND BLOOD
BANKING**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Summarize the characters of human blood.
2. How will you prepare Wintrobe mixture?
3. What are the types of Leucocytes?
4. List out the factors causing falsely high count of RBC.
5. What is bleeding time?
6. List out the Hematological indices.
7. How will you prepare blood smear for staining?
8. List out the staining techniques employed in Haematology
9. Discuss briefly about Landsteiner's rule.
10. How blood samples are stored for longer time?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Outline the procedure for capillary blood collection from infants and adults.

Or

- (b) Discuss in detail about different type of blood cells and their importance.

12. (a) Explain briefly about Microdilution method of RBC counting.

Or

- (b) Discuss in detail about Reticulocyte counting.

13. (a) Explain in detail about Normal values and clinical significance of ESR.

Or

- (b) Discuss in detail about MCH concentration.

14. (a) Explain in detail about Leishman's staining.

Or

- (b) How will you detect malarial parasites?

15. (a) What is Rh factor? Discuss in detail about its clinical significance.

Or

- (b) Explain in detail about Cross matching.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Why anticoagulants are used in Hematological investigations? Discuss in detail about usage, advantages and disadvantages of Heparin as anticoagulant.

17. What is the composition of Hemoglobin? How will you estimate hemoglobin by different methods?

18. Discuss in detail about the clinical significance and Determination of PCV.

19. Explain briefly about the following.

(a) Peripheral blood smear report format

(b) Peroxidase staining.

20. Discuss briefly about the following.

(a) Coomb's test and its significance.

(b) Types of collection of blood samples from infants.